| Month and Year |  | Mid-term rate for monthly compounding | Convert to a monthly rate $(1+i)^{1 / 12}-1$ |
| :---: | :---: | :---: | :---: |
| Jan | 2018 | 2.16\% | 0.1782\% |
| Dec | 2017 | 2.09\% | 0.1725\% |
| Nov | 2017 | 1.98\% | 0.1635\% |
| Oct | 2017 | 1.83\% | 0.1512\% |
| Sep | 2017 | 1.92\% | 0.1586\% |
| Aug | 2017 | 1.93\% | 0.1594\% |
| Jul | 2017 | 1.87\% | 0.1545\% |
| Jun | 2017 | 1.94\% | 0.1602\% |
| May | 2017 | 2.02\% | 0.1668\% |
| Apr | 2017 | 2.10\% | 0.1733\% |
| Mar | 2017 | 2.03\% | 0.1676\% |
| Feb | 2017 | 2.08\% | 0.1717\% |
| Jan | 2017 | 1.95\% | 0.1611\% |
| Dec | 2016 | 1.46\% | 0.1209\% |
| Nov | 2016 | 1.33\% | 0.1102\% |
| Oct | 2016 | 1.29\% | 0.1069\% |
| Sep | 2016 | 1.22\% | 0.1011\% |
| Aug | 2016 | 1.18\% | 0.0978\% |
| Jul | 2016 | 1.42\% | 0.1176\% |
| Jun | 2016 | 1.41\% | 0.1167\% |
| May | 2016 | 1.42\% | 0.1176\% |
| Apr | 2016 | 1.44\% | 0.1192\% |
| Mar | 2016 | 1.47\% | 0.1217\% |
| Feb | 2016 | 1.80\% | 0.1488\% |
| Jan | 2016 | 1.79\% | 0.1480\% |
| Dec | 2015 | 1.66\% | 0.1373\% |
| Nov | 2015 | 1.57\% | 0.1299\% |
| Oct | 2015 | 1.65\% | 0.1365\% |
| Sep | 2015 | 1.75\% | 0.1447\% |
| Aug | 2015 | 1.81\% | 0.1496\% |
| Jul | 2015 | 1.75\% | 0.1447\% |
| Jun | 2015 | 1.58\% | 0.1307\% |
| May | 2015 | 1.52\% | 0.1258\% |
| Apr | 2015 | 1.68\% | 0.1389\% |
| Mar | 2015 | 1.46\% | 0.1209\% |
| Feb | 2015 | 1.68\% | 0.1389\% |
| Jan | 2015 | 1.73\% | 0.1430\% |
| Dec | 2014 | 1.70\% | 0.1406\% |
| Nov | 2014 | 1.88\% | 0.1553\% |
| Oct | 2014 | 1.83\% | 0.1512\% |
| Sep | 2014 | 1.84\% | 0.1521\% |
| Aug | 2014 | 1.87\% | 0.1545\% |
| Jul | 2014 | 1.80\% | 0.1488\% |


| Month and Year |  | Mid-term rate for monthly compounding | Convert to a monthly rate $(1+i)^{1 / 12}-1$ |
| :---: | :---: | :---: | :---: |
| Jun | 2014 | 1.89\% | 0.1562\% |
| May | 2014 | 1.91\% | 0.1578\% |
| Apr | 2014 | 1.79\% | 0.1480\% |
| Mar | 2014 | 1.82\% | 0.1504\% |
| Feb | 2014 | 1.95\% | 0.1611\% |
| Jan | 2014 | 1.73\% | 0.1430\% |
| Dec | 2013 | 1.63\% | 0.1348\% |
| Nov | 2013 | 1.71\% | 0.1414\% |
| Oct | 2013 | 1.91\% | 0.1578\% |
| Sep | 2013 | 1.64\% | 0.1357\% |
| Aug | 2013 | 1.61\% | 0.1332\% |
| Jul | 2013 | 1.22\% | 0.1011\% |
| Jun | 2013 | 0.95\% | 0.0788\% |
| May | 2013 | 1.00\% | 0.0830\% |
| Apr | 2013 | 1.09\% | 0.0904\% |
| Mar | 2013 | 1.09\% | 0.0904\% |
| Feb | 2013 | 1.01\% | 0.0838\% |
| Jan | 2013 | 0.87\% | 0.0722\% |
| Dec | 2012 | 0.95\% | 0.0788\% |
| Nov | 2012 | 0.89\% | 0.0739\% |
| Oct | 2012 | 0.93\% | 0.0772\% |
| Sep | 2012 | 0.84\% | 0.0697\% |
| Aug | 2012 | 0.88\% | 0.0730\% |
| Jul | 2012 | 0.92\% | 0.0763\% |
| Jun | 2012 | 1.07\% | 0.0887\% |
| May | 2012 | 1.30\% | 0.1077\% |
| Apr | 2012 | 1.15\% | 0.0953\% |
| Mar | 2012 | 1.08\% | 0.0896\% |
| Feb | 2012 | 1.12\% | 0.0929\% |
| Jan | 2012 | 1.17\% | 0.0970\% |
| Dec | 2011 | 1.27\% | 0.1052\% |
| Nov | 2011 | 1.20\% | 0.0995\% |
| Oct | 2011 | 1.19\% | 0.0986\% |
| Sep | 2011 | 1.61\% | 0.1332\% |
| Aug | 2011 | 1.88\% | 0.1553\% |
| Jul | 2011 | 1.98\% | 0.1635\% |
| Jun | 2011 | 2.25\% | 0.1856\% |
| May | 2011 | 2.42\% | 0.1995\% |
| Apr | 2011 | 2.46\% | 0.2027\% |
| Mar | 2011 | 2.42\% | 0.1995\% |
| Feb | 2011 | 2.31\% | 0.1905\% |
| Jan | 2011 | 1.93\% | 0.1594\% |
| Dec | 2010 | 1.52\% | 0.1258\% |


| Month and Year |  | Mid-term rate for monthly compounding | Convert to a monthly rate $(1+i)^{1 / 12}-1$ |
| :---: | :---: | :---: | :---: |
| Nov | 2010 | 1.57\% | 0.1299\% |
| Oct | 2010 | 1.71\% | 0.1414\% |
| Sep | 2010 | 1.92\% | 0.1586\% |
| Aug | 2010 | 2.16\% | 0.1782\% |
| Jul | 2010 | 2.33\% | 0.1921\% |
| Jun | 2010 | 2.68\% | 0.2206\% |
| May | 2010 | 2.83\% | 0.2328\% |
| Apr | 2010 | 2.67\% | 0.2198\% |
| Mar | 2010 | 2.66\% | 0.2190\% |
| Feb | 2010 | 2.78\% | 0.2288\% |
| Jan | 2010 | 2.43\% | 0.2003\% |
| Dec | 2009 | 2.61\% | 0.2149\% |
| Nov | 2009 | 2.56\% | 0.2109\% |
| Oct | 2009 | 2.63\% | 0.2166\% |
| Sep | 2009 | 2.83\% | 0.2328\% |
| Aug | 2009 | 2.76\% | 0.2271\% |
| Jul | 2009 | 2.72\% | 0.2239\% |
| Jun | 2009 | 2.23\% | 0.1840\% |
| May | 2009 | 2.03\% | 0.1676\% |
| Apr | 2009 | 2.13\% | 0.1758\% |
| Mar | 2009 | 1.92\% | 0.1586\% |
| Feb | 2009 | 1.63\% | 0.1348\% |
| Jan | 2009 | 2.04\% | 0.1684\% |
| Dec | 2008 | 2.81\% | 0.2312\% |
| Nov | 2008 | 2.93\% | 0.2409\% |
| Oct | 2008 | 3.12\% | 0.2564\% |
| Sep | 2008 | 3.41\% | 0.2798\% |
| Aug | 2008 | 3.49\% | 0.2863\% |
| Jul | 2008 | 3.40\% | 0.2790\% |
| Jun | 2008 | 3.15\% | 0.2588\% |
| May | 2008 | 2.70\% | 0.2223\% |
| Apr | 2008 | 2.83\% | 0.2328\% |
| Mar | 2008 | 2.93\% | 0.2409\% |
| Feb | 2008 | 3.46\% | 0.2839\% |
| Jan | 2008 | 3.52\% | 0.2887\% |
| Dec | 2007 | 4.06\% | 0.3322\% |
| Nov | 2007 | 4.30\% | 0.3515\% |
| Oct | 2007 | 4.26\% | 0.3483\% |
| Sep | 2007 | 4.68\% | 0.3819\% |
| Aug | 2007 | 4.98\% | 0.4058\% |
| Jul | 2007 | 4.84\% | 0.3947\% |
| Jun | 2007 | 4.55\% | 0.3715\% |
| May | 2007 | 4.53\% | 0.3699\% |


| Month and Year |  | Mid-term rate for monthly compounding | Convert to a monthly rate $(1+i)^{1 / 12}-1$ |
| :---: | :---: | :---: | :---: |
| Apr | 2007 | 4.52\% | 0.3691\% |
| Mar | 2007 | 4.75\% | 0.3875\% |
| Feb | 2007 | 4.60\% | 0.3755\% |
| Jan | 2007 | 4.49\% | 0.3667\% |
| Dec | 2006 | 4.64\% | 0.3787\% |
| Nov | 2006 | 4.60\% | 0.3755\% |
| Oct | 2006 | 4.71\% | 0.3843\% |
| Sep | 2006 | 4.90\% | 0.3994\% |
| Aug | 2006 | 5.09\% | 0.4146\% |
| Jul | 2006 | 4.94\% | 0.4026\% |
| Jun | 2006 | 4.95\% | 0.4034\% |
| May | 2006 | 4.73\% | 0.3859\% |
| Apr | 2006 | 4.63\% | 0.3779\% |
| Mar | 2006 | 4.42\% | 0.3611\% |
| Feb | 2006 | 4.31\% | 0.3523\% |
| Jan | 2006 | 4.39\% | 0.3587\% |
| Dec | 2005 | 4.43\% | 0.3619\% |
| Nov | 2005 | 4.15\% | 0.3394\% |
| Oct | 2005 | 4.01\% | 0.3282\% |
| Sep | 2005 | 4.11\% | 0.3362\% |
| Aug | 2005 | 3.85\% | 0.3153\% |
| Jul | 2005 | 3.79\% | 0.3105\% |
| Jun | 2005 | 3.94\% | 0.3225\% |
| May | 2005 | 4.20\% | 0.3434\% |
| Apr | 2005 | 4.02\% | 0.3290\% |
| Mar | 2005 | 3.76\% | 0.3081\% |
| Feb | 2005 | 3.76\% | 0.3081\% |
| Jan | 2005 | 3.70\% | 0.3032\% |
| Dec | 2004 | 3.50\% | 0.2871\% |
| Nov | 2004 | 3.49\% | 0.2863\% |
| Oct | 2004 | 3.56\% | 0.2919\% |
| Sep | 2004 | 3.77\% | 0.3089\% |
| Aug | 2004 | 3.93\% | 0.3217\% |
| Jul | 2004 | 4.04\% | 0.3306\% |
| Jun | 2004 | 3.82\% | 0.3129\% |
| May | 2004 | 3.12\% | 0.2564\% |
| Apr | 2004 | 3.11\% | 0.2555\% |
| Mar | 2004 | 3.29\% | 0.2701\% |
| Feb | 2004 | 3.39\% | 0.2782\% |
| Jan | 2004 | 3.46\% | 0.2839\% |
| Dec | 2003 | 3.49\% | 0.2863\% |
| Nov | 2003 | 3.27\% | 0.2685\% |
| Oct | 2003 | 3.59\% | 0.2944\% |


| Month and Year |  | Mid-term rate for monthly compounding | Convert to a monthly rate $(1+i)^{1 / 12}-1$ |
| :---: | :---: | :---: | :---: |
| Sep | 2003 | 3.38\% | 0.2774\% |
| Aug | 2003 | 2.67\% | 0.2198\% |
| Jul | 2003 | 2.52\% | 0.2076\% |
| Jun | 2003 | 3.02\% | 0.2482\% |
| May | 2003 | 3.13\% | 0.2572\% |
| Apr | 2003 | 2.92\% | 0.2401\% |
| Mar | 2003 | 3.19\% | 0.2620\% |
| Feb | 2003 | 3.22\% | 0.2645\% |
| Jan | 2003 | 3.38\% | 0.2774\% |
| Dec | 2002 | 3.26\% | 0.2677\% |
| Nov | 2002 | 3.02\% | 0.2482\% |
| Oct | 2002 | 3.41\% | 0.2798\% |
| Sep | 2002 | 3.69\% | 0.3024\% |
| Aug | 2002 | 4.16\% | 0.3402\% |
| Jul | 2002 | 4.51\% | 0.3683\% |
| Jun | 2002 | 4.64\% | 0.3787\% |
| May | 2002 | 4.88\% | 0.3978\% |
| Apr | 2002 | 4.56\% | 0.3723\% |
| Mar | 2002 | 4.43\% | 0.3619\% |
| Feb | 2002 | 4.54\% | 0.3707\% |
| Jan | 2002 | 4.40\% | 0.3595\% |
| Dec | 2001 | 3.90\% | 0.3193\% |
| Nov | 2001 | 4.06\% | 0.3322\% |
| Oct | 2001 | 4.50\% | 0.3675\% |
| Sep | 2001 | 4.71\% | 0.3843\% |
| Aug | 2001 | 4.88\% | 0.3978\% |
| Jul | 2001 | 5.01\% | 0.4082\% |
| Jun | 2001 | 4.91\% | 0.4002\% |
| May | 2001 | 4.66\% | 0.3803\% |
| Apr | 2001 | 4.83\% | 0.3939\% |
| Mar | 2001 | 4.96\% | 0.4042\% |
| Feb | 2001 | 4.96\% | 0.4042\% |
| Jan | 2001 | 5.47\% | 0.4448\% |
| Dec | 2000 | 5.72\% | 0.4646\% |
| Nov | 2000 | 5.85\% | 0.4749\% |
| Oct | 2000 | 5.93\% | 0.4812\% |
| Sep | 2000 | 6.05\% | 0.4907\% |
| Aug | 2000 | 6.15\% | 0.4986\% |
| Jul | 2000 | 6.42\% | 0.5199\% |
| Jun | 2000 | 6.42\% | 0.5199\% |
| May | 2000 | 6.22\% | 0.5041\% |
| Apr | 2000 | 6.51\% | 0.5270\% |
| Mar | 2000 | 6.60\% | 0.5340\% |


| Month and Year | Mid-term rate for <br> monthly <br> compounding | Convert to a <br> monthly rate <br> $(1+i)^{1 / 12}-1$ |  |
| :--- | ---: | :---: | :---: |
| Feb | 2000 | $6.37 \%$ | $0.5159 \%$ |
| Jan | 2000 | $6.04 \%$ | $0.4899 \%$ |
| Dec | 1999 | $6.03 \%$ | $0.4891 \%$ |
| Nov | 1999 | $5.92 \%$ | $0.4804 \%$ |
| Oct | 1999 | $5.86 \%$ | $0.4757 \%$ |
| Sep | 1999 | $5.82 \%$ | $0.4725 \%$ |
| Aug | 1999 | $5.80 \%$ | $0.4709 \%$ |
| Jul | 1999 | $5.67 \%$ | $0.4606 \%$ |
| Jun | 1999 | $5.24 \%$ | $0.4265 \%$ |
| May | 1999 | $5.10 \%$ | $0.4154 \%$ |
| Apr | 1999 | $5.15 \%$ | $0.4194 \%$ |
| Mar | 1999 | $4.72 \%$ | $0.3851 \%$ |
| Feb | 1999 | $4.62 \%$ | $0.3771 \%$ |
| Jan | 1999 | $4.55 \%$ | $0.3715 \%$ |

